FIG. 1 (PRIOR ART)

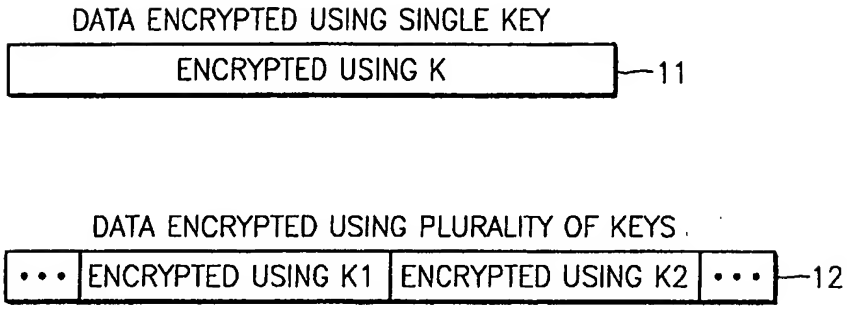


FIG. 2 (PRIOR ART)

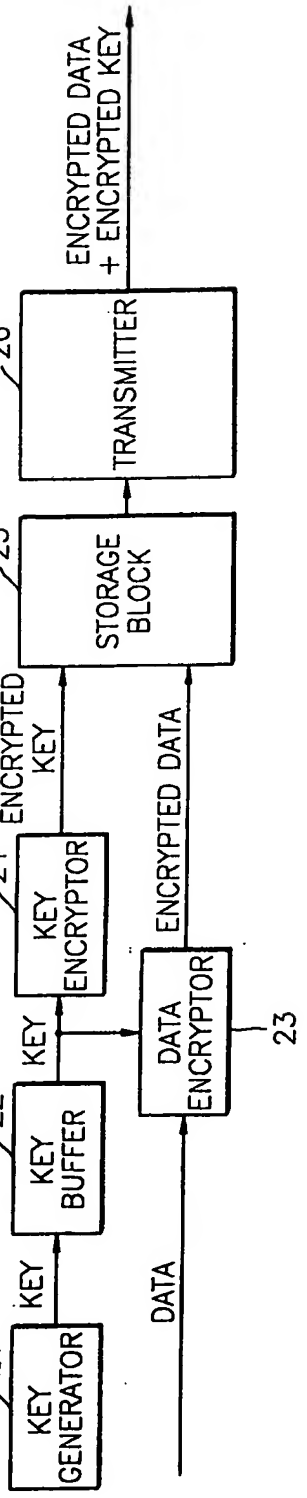


FIG. 3 (PRIOR ART)

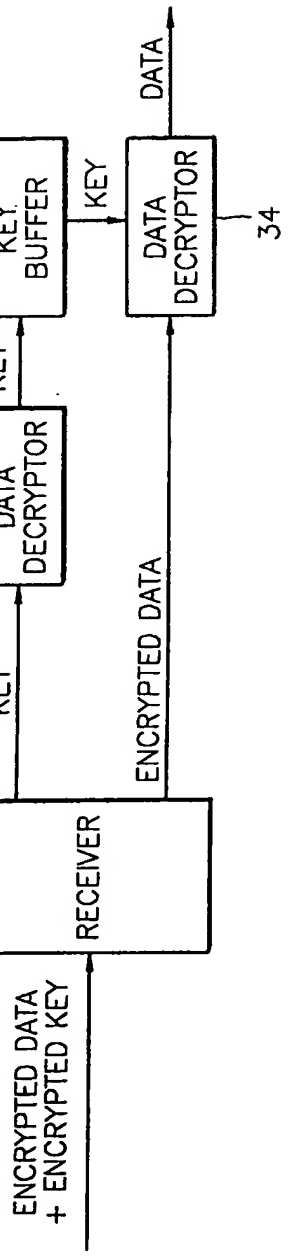
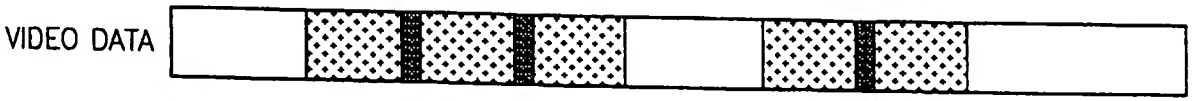


FIG. 4 (PRIOR ART)



■: ENCRYPTED USING K1
▩: ENCRYPTED USING K2
□: ENCRYPTED USING K3

OBJECT TO BE DECRYPTED	KEY TO BE TRANSMITTED
KEY FRAME	K1
KEY CLIP	K1, K2
ENTIRE VIDEO DATA	K1, K2, K3

FIG. 5

■: ENCRYPTED USING K3
▩: ENCRYPTED USING K2
□: ENCRYPTED USING K1

K3=FUNC2(K2)
K2=FUNC1(K1)
FUNC1, FUNC2: ONE-WAY FUNCTION

OBJECT TO BE DECRYPTED	KEY TO BE TRANSMITTED
KEY FRAME	K3
KEY CLIP	K2
ENTIRE VIDEO DATA	K1

REPLACEMENT SHEET

FIG. 6

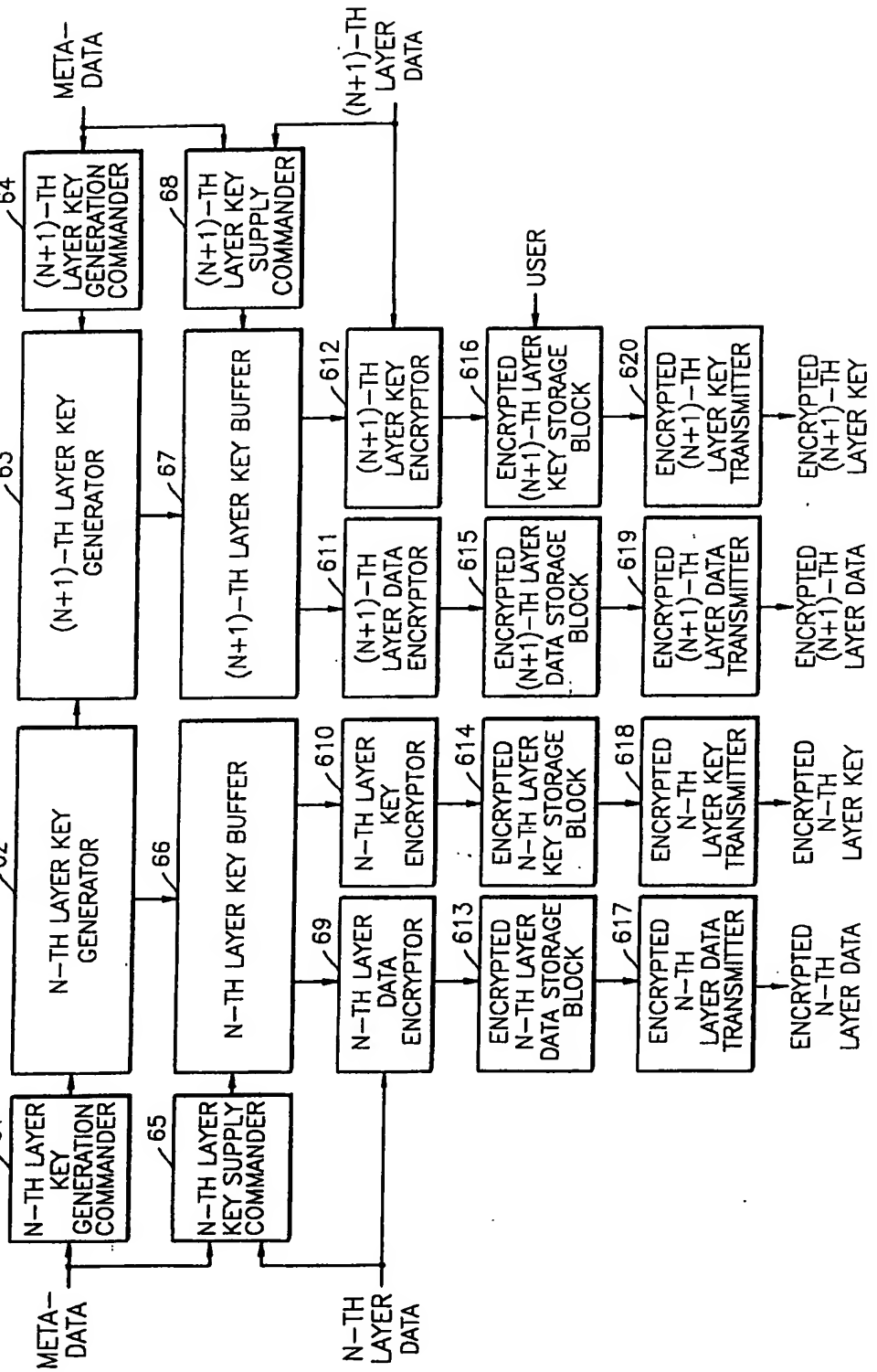

META-DATA
(N+1)-TH LAYER KEY GENERATION COMMANDER
64
(N+1)-TH LAYER KEY SUPPLY COMMANDER
68
META-DATA
(N+1)-TH LAYER DATA
(N+1)-TH LAYER KEY GENERATOR
63
(N+1)-TH LAYER KEY BUFFER
67
(N+1)-TH LAYER KEY ENCRYPTOR
612
ENCRYPTED (N+1)-TH LAYER KEY STORAGE BLOCK
616
USER
ENCRYPTED (N+1)-TH LAYER KEY TRANSMITTER
620
ENCRYPTED (N+1)-TH LAYER KEY
(N+1)-TH LAYER DATA ENCRYPTOR
611
ENCRYPTED (N+1)-TH LAYER DATA STORAGE BLOCK
615
ENCRYPTED (N+1)-TH LAYER DATA TRANSMITTER
619
ENCRYPTED (N+1)-TH LAYER DATA
N-TH LAYER KEY GENERATOR
62
N-TH LAYER KEY BUFFER
66
N-TH LAYER KEY ENCRYPTOR
610
ENCRYPTED N-TH LAYER KEY STORAGE BLOCK
614
ENCRYPTED N-TH LAYER KEY TRANSMITTER
618
ENCRYPTED N-TH LAYER KEY
N-TH LAYER DATA ENCRYPTOR
69
ENCRYPTED N-TH LAYER DATA STORAGE BLOCK
613
ENCRYPTED N-TH LAYER DATA TRANSMITTER
617
ENCRYPTED N-TH LAYER DATA
N-TH LAYER KEY GENERATION COMMANDER
61
N-TH LAYER KEY SUPPLY COMMANDER
65
META-DATA
N-TH LAYER DATA

FIG. 7

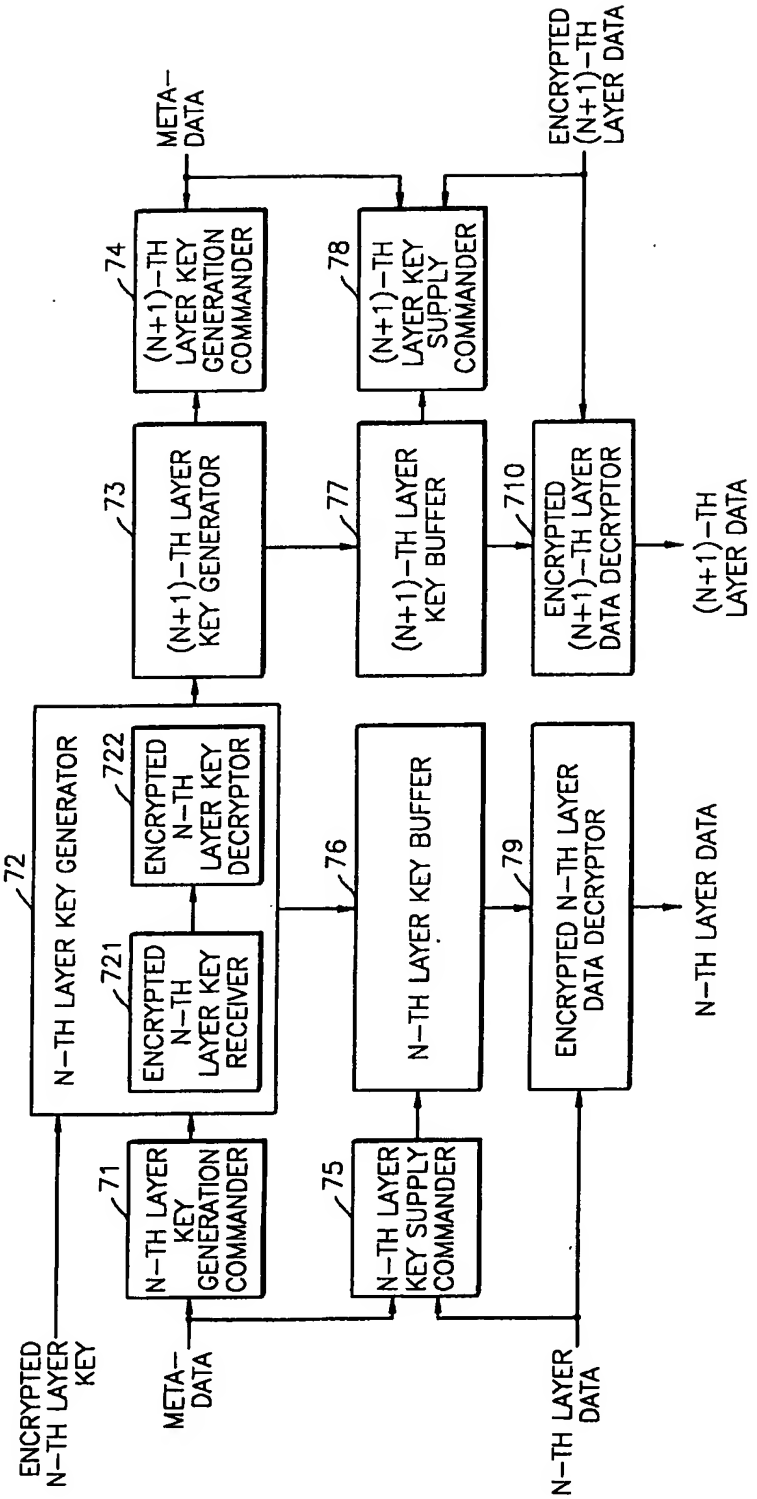

ENCRYPTED N-TH LAYER KEY
META-DATA
N-TH LAYER DATA
ENCRYPTED (N+1)-TH LAYER DATA
META-DATA
71
N-TH LAYER KEY GENERATION COMMANDER
75
N-TH LAYER KEY SUPPLY COMMANDER
72
N-TH LAYER KEY GENERATOR
721
ENCRYPTED N-TH LAYER KEY RECEIVER
722
ENCRYPTED N-TH LAYER KEY DECRYPTOR
76
N-TH LAYER KEY BUFFER
79
ENCRYPTED N-TH LAYER DATA DECRYPTOR
N-TH LAYER DATA
73
(N+1)-TH LAYER KEY GENERATOR
74
(N+1)-TH LAYER KEY GENERATION COMMANDER
77
(N+1)-TH LAYER KEY BUFFER
78
(N+1)-TH LAYER KEY SUPPLY COMMANDER
710
ENCRYPTED (N+1)-TH LAYER DATA DECRYPTOR
(N+1)-TH LAYER DATA

FIG. 8

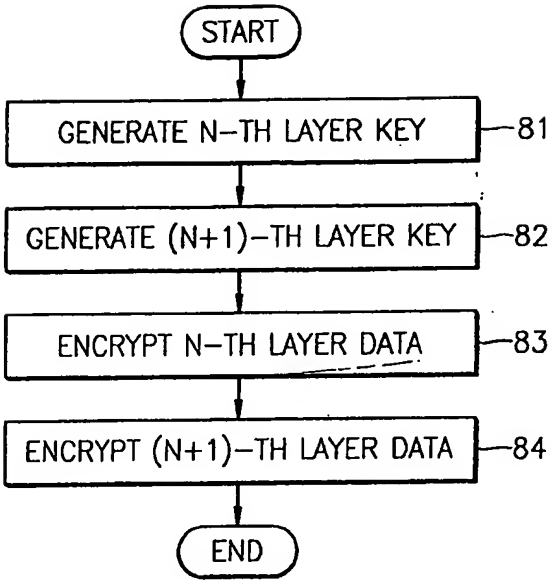
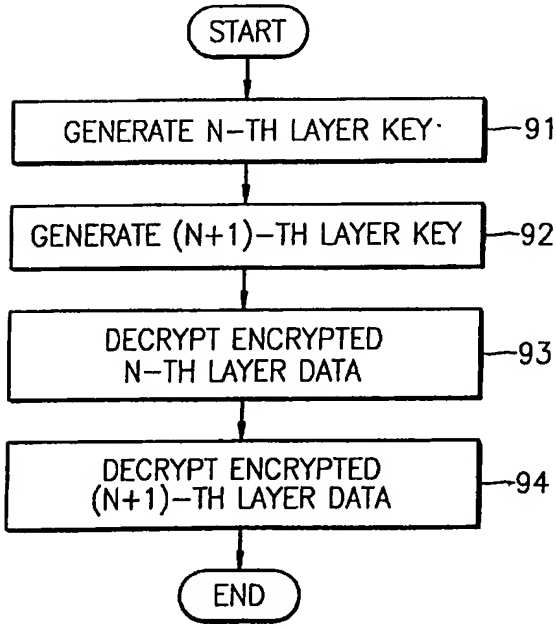

START
GENERATE N-TH LAYER KEY
81
GENERATE (N+1)-TH LAYER KEY
82
ENCRYPT N-TH LAYER DATA
83
ENCRYPT (N+1)-TH LAYER DATA
84
END

FIG. 9


START
GENERATE N-TH LAYER KEY
91
GENERATE (N+1)-TH LAYER KEY
92
DECRYPT ENCRYPTED N-TH LAYER DATA
93
DECRYPT ENCRYPTED (N+1)-TH LAYER DATA
94
END